

## OBSERVATIONS ON THE PROPAGATION AND BEHAVIOR OF TELEA POLYPHEMUS.

By CHAS. RUMMEL, Entomological Society, Newark, N. J.

One evening in June 1925 a female *Telea polyphemus* was tied out for the purpose of getting a mate. The following morning two males were found attached to it, one to each side. As the female was tied to the outside of a screen cage, this cage, without disturbing the three specimens, was taken into my room. Close examination did not disclose which one of the two males was actually in copulation with the female, but during the forenoon it was observed that one had flown to a window curtain where it was allowed to rest for the day. The other male was found to be in copulation with the female and remained so until evening when both males were given their liberty.

A few days later there were four freshly emerged females in my breeding cage. In order to keep track of them they were numbered from one to four. One, two and three were tied to the cage and left on the porch of the house. Number four was tied in a peach basket turned bottom up, and suspended from a tree at the edge of a woodland, about one thousand feet from the house. The following morning number one had no mate, but as the eggs proved to be fertile, copulation must have taken place and been completed during the night. Female number two I found mated and I numbered the male correspondingly. With female number three I found two males, one attached to each side. In this case it was easily to be seen that the one to the left was in copulation while the one to the right was merely holding on to the body of the female. I numbered the male in copulation as three and in order to prevent a mistake later on I clipped off a portion of its right forewing. The male on the right I numbered as four. The cage was taken into the room without disturbing the specimens. The female number four was not mated.

About 10 A. M. a flutter was heard from the direction of the cage and it was observed at once that male number three with the clipped wing had left the female and was resting on a window curtain a foot away. The female and male number four were engaged in a struggle, the female making strenuous efforts to get away, but the male equally determined to effect a copulation in which it succeeded in a few seconds. They were left undisturbed until evening when they separated of their own accord. During the night the three males were given their liberty.

The following morning male number three with the clipped wing was found to be mated with female number four in the peach basket. As entomologists in the past apparently have accepted the theory that these insects mate only once, it will be of interest to note the behavior of female number three and males numbers three and four. The behavior of female and male number three should establish the fact that in at least some cases more than one mating takes place on the part of both sexes. The behavior of male number four should be still more interesting as there seems to be a tendency toward reasoning power, taking in consideration the fact that this male kept its position quietly and persistently until male number three left its position, which it immediately covered.

---

**Melitaea harrisi** Scudder from Long Island, N. Y.—Although it has been a favorite collecting ground since entomological pioneer days in North America, interesting additions to the insect fauna of Long Island are still coming in.

For the spring season of 1926 we record the capture of a fine, newly emerged female specimen of *M. harrisi* taken on June 17th in a meadow bordering upon the salt water marshes of Jamaica Bay, south of Woodhaven. While asters are said to be the food-plant of this butterfly, the particular aster in this case appears to be *Doellingeria umbellata* (tall, flat-topped white aster) of which a good stand limited to this region so far has escaped the destructive encroachments of real estate developments. Ernest Shoemaker, A. C. Weeks and others who formerly devoted so much time to collecting in the vicinity of Jamaica Bay omit this butterfly in their lists of local captures. From all information available it is here recorded for the first time from Long Island.—GEO. P. ENGELHARDT, Brooklyn Museum.